

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D119-796 REV. E AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D119-796 REV. 3

REF CANADIAN: STC SH14-45

REF FAA STC: SR03504NY

REF EASA STC: 10052022

1.0 PURPOSE



The purpose of this Dart Service Instruction is to add an aluminum abrasion strip (shim) to the D119-796-101/-103 Fwd Crosstube under the OEM lower clamp assy (P/N 109-0570-20-107) to reduce the abrasion and increase the clamping force on the fwd crosstubes. The DSI9730-011 Kit is available for customers who prefer to use pre-fabricated shims from Dart.

2.0 INSTALLATION

Note: To perform the following installation, the fwd crosstube must be lowered from the aircraft structure sufficiently to allow a minimum gap of 0.50 inches between the mating surfaces of the 109-0570-15-101 Fitting Assy and the D5124-1 Fwd Support.

- 2.1 Remove the (qty 2) 109-0570-20-107 Clamp Assy and (qty 2) outboard MS21920 Clamps and Cushions. Retain hardware.
- 2.2 If not using the DSI9730-011 Shim Kit, fabricate two rectangular shims as per Figure 1 using 16 gauge (0.051in thk) aluminum. Break all sharp edges 0.010in to 0.025in max (0.25mm - 0.64mm). Treat with chemical film material (Alodine 1200 or 1201) per MIL-C-5541.
- 2.3 Form the shims to fit the underside of the crosstube in the location shown in Figure 2. Note that the long axis of the shim is along the circumferential direction of the crosstube.
- 2.4 Abrade mating surfaces of the shims and crosstube with Scotch Brite and remove residue. Apply a minimum 0.020"-0.040" (0.51mm - 1.02mm) thk layer of Proseal 890 B1/2 or B2 on the concave surface of the shims and install in the location shown in Figure 2.
- 2.5 Apply clamping pressure using the outboard MS21920 Clamps with Cushions as well as an additional MS21920 Clamps as shown in Figure 2. Tighten the MS21920 Clamps sufficiently to allow even pressure on the circumference of the shims (do not torque the MS21920 Clamps). Allow Proseal 890 to cure for minimum of 36 hours with clamping pressure.
- 2.6 Torque outboard MS21920-24 Clamps securing the D5124-1 Fwd Supports to the crosstube to 80-100 in-lbs (9.0 - 11.3 Nm)
- 2.7 Remove additional MS21920 Clamps and re-install the D119-796-101/-103 Fwd Crosstube with 109-0570-20-107 Clamps in accordance with applicable Maintenance Instructions.

CANADA DEPARTMENT OF TRANSPORT AIRCRAFT CERTIFICATION BRANCH DAO # 01-0-01	
APPROVED 	
BY:	D. SHEPHERD (DE # 02)
DATE:	15.09.24
CERT. NO.:	SH14-45
ISSUE NO.:	1

B	ADD INSPECTION REQUIREMENTS (SECTION 3)	AP	15.09.24
A	NEW ISSUE	AP	15.08.20
REV.	DESCRIPTION	BY	DATE
DESIGN	AP	DART AEROSPACE, LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AP		
CHECKED	q?	DRAWING NO.	REV.B
MFG. APPR.	N/A	DSI 9730	SHEET 1 OF 3
APPROVED		TITLE	SCALE
DE APPR.		FWD CROSSTUBE SHIM INSTL	NTS
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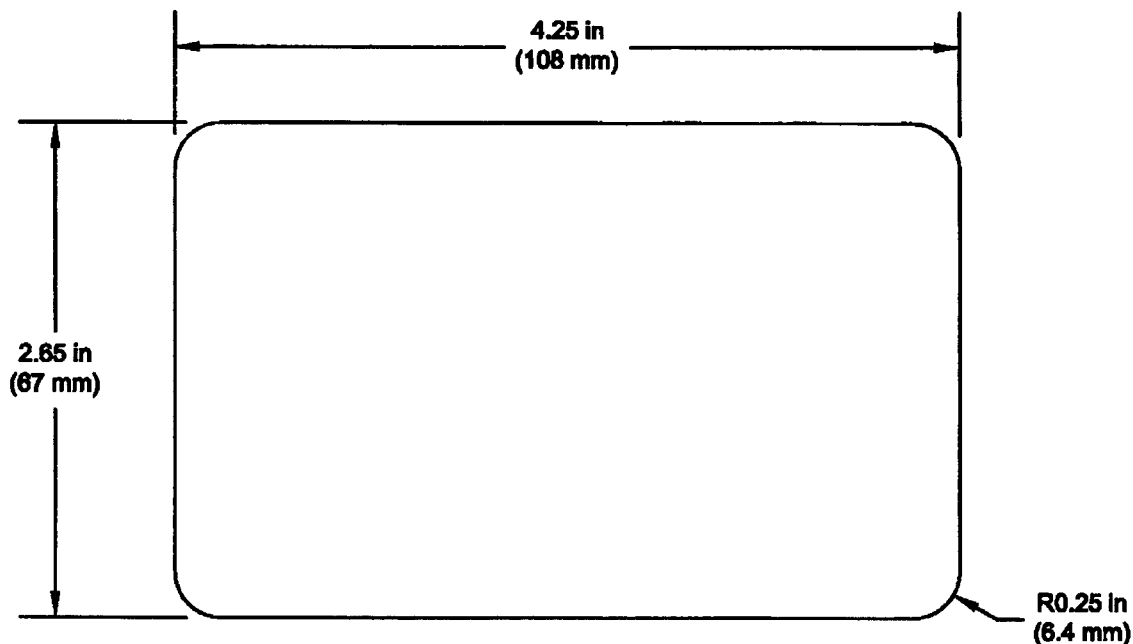


Figure 1: Fwd Crosstube Shim Dimensions (D5305-1 Shim)

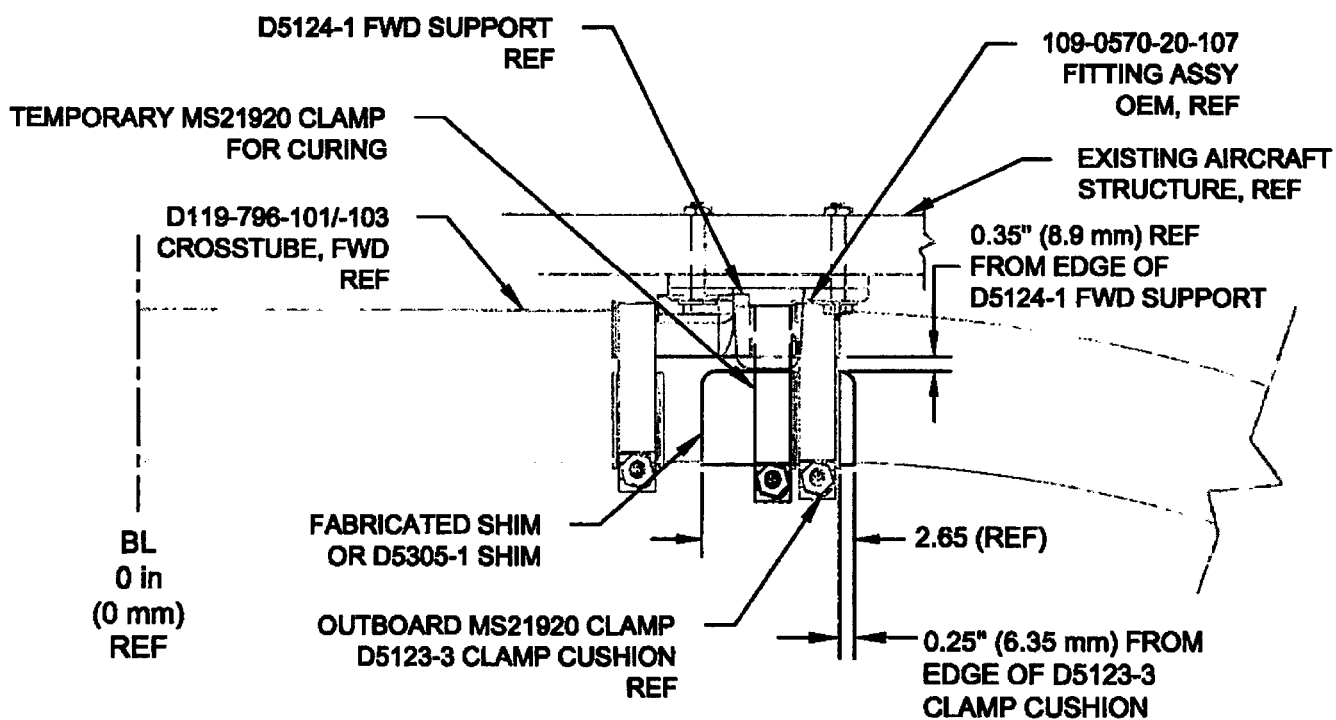


Figure 2: Fwd Crosstube Shim Installation

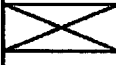
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CHECKED	<i>q</i>	DRAWING NO.	REV.B
MFG. APPR.	N/A	DSI 9730	SHEET 2 OF 3
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3.0 AMENDMENT TO ICA-D119-796 REV. 3

The following is to be performed in addition to requirements specified in ICA-D119-796 Rev. 3 Section 5.3, 400 Hour/Annual Inspection.



- 3.1 Inspect D5305-1 Shim for damage, wear and corrosion. Remove damage/corrosion to maximum depth of 0.020in (0.508mm) & touch up affected area in accordance with Section 5.3.12 (ref ICA-D119-796 Rev. 3). Replace D5305-1 if damage exceeds limitations stated above. Inspect for evidence of slipping or disbonding. If slipping or disbonding is found, re-install the D5305-1 Shim in accordance with Section 2.0 of this Service Instruction.

4.0 PARTS LIST

QTY -011	PART NUMBER	DESCRIPTION
	DSI9730-011	SHIM KIT
2	D5305-1	SHIM
2	MS21920-24	CLAMP

5.0 WEIGHT AND BALANCE

There is negligible weight and balance change associated with this modification.

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MFG. APPR.	N/A	DSI 9730	SHEET 3 OF 3
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